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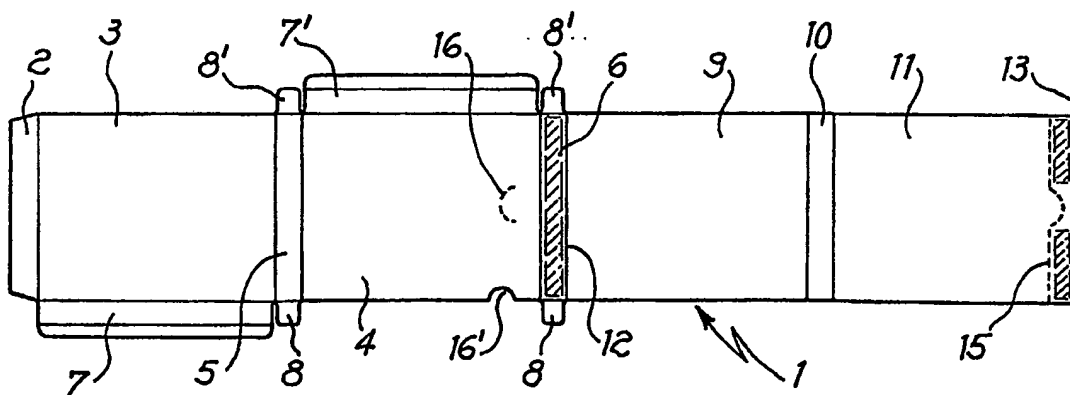
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(84) A container, in particular for drugs and a method for manufacturing the same.

(57) A container, in particular for packings of drugs and similar products, of the type consisting in a single die-cut piece of cardboard, folded and stuck, has one of the sides of said die-cut piece provided with at least one flap foldable externally to the container itself and, said container being pro-

vided with detachable bonding means capable of holding said foldable flap or flaps substantially adhering to the wall or walls of the shaped container and allow its unfolding when needed.

Fig. 1



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"A CONTAINER, IN PARTICULAR FOR DRUGS AND A METHOD FOR MANUFACTURING THE SAME"

The present invention concerns a container, or packing, in particular for drugs, cosmetics and the like, and more in general for all those products which require an accompanying leaflet.

As it is known, all pharmaceutical products require an illustrative leaflet in which a series of information and warnings are reported which comprise composition of the drug, dosage and administration, contraindications and the like.

Said information require a certain minimum room to be printed in a readable way and therefore, considering the reduced size of said containers and similar packings, said information must be printed on a separate sheet, known as "internal leaflet".

It is evident that this affects the packing cost particularly in that each leaflet must be handled separately and then introduced into the formed box during the packaging operation.

Of course similar problems arise also for other kinds of products which require the presence of an illustrative leaflet, such as for instance cosmetics, para-pharmaceutical products and the like.

There is therefore the need of providing a container, case or similar packing capable of solving the aforementioned problems avoiding separate handling of internal leaflets.

Accordingly, an object of the present invention is to provide a container, case or similar packing including said leaflet in one piece.

A further object of the present invention is to provide a method for manufacturing said containers.

Said objects are achieved by the present invention, which relates to a container comprising the internal leaflet, and a method for the manufacture thereof.

More particularly, the present invention concerns a container, specially for packings of medicinal products and the like, of the type consisting of a single die-cut piece, folded and stuck, characterized in that at least one of the sides of said piece is provided with at least a flap foldable externally to the container itself and in that said box is provided with detachable bonding means to hold said foldable flap or flaps substantially adhering to the wall or walls of the shaped container and to allow its unfolding when needed, and in that on at least part of said flaps and/or said corresponding walls information, warnings and similar messages are printed.

Furthermore the invention concerns a method for manufacturing a container of the aforementioned type, characterized in that it comprises the steps of:

obtaining a die-cut piece provided along at least

one of its sides with at least a foldable flap, such as to result external and able to be overlapped to at least part of one or more corresponding walls of the formed container;

printing, before or after the preparation of said die-cut piece, the text and/or information required on said wall(s) and/or on the internal side of said foldable flap(s);

folding and sticking to each other the die-cut walls to form said container;

and folding said flap(s) and bonding it (them) in a detachable way onto the corresponding wall(s) of the container.

The invention will be now further described with reference to the accompanying drawings given by way of non limiting example and wherein:

- figure 1 is a top view of a die-cut piece of card board or the like according to the invention;

- figure 2 is a top view of the die-cut piece of fig. 1 partially folded; and

- figure 3 is a magnified perspective view of the partially formed container.

First of all, it is here pointed out that the word "die-cut piece" is meant to indicate not only an element obtained by die-cutting a cardboard sheet or suitable plastic material, but also a similar element obtained by other ways, such as for instance by molding without die-cutting.

Figures 1-3 show a preferential embodiment in which the die-cut piece 1 is drawn from the type of die-cut cardboard material generally used to obtain a container for packing for instance tablets in blister, and which comprises two longitudinal walls 3 and 4 and three transverse walls 2, 5, 6. The verso of wall 2 is stuck onto the recto of wall 6 to form the desired container or case. In all figures, the areas for adhesive application have been highlighted by hatching. The container closure is ensured in a known way by foldable tongues 7, 7', 8, 8'.

According to the invention, at least one of the sides of the "traditional" die-cut piece, namely at least one of the sides of walls 2-6, is provided with at least one flap adapted to be folded externally to the container itself and fixable in a detachable way to one of the container walls, so as to be able to substantially adhere to said wall and to be removed from it when desired. The terms "detachable fixing" and "detachable fixing means" as used herein mean a fixing mode and means of said foldable flap(s) to the corresponding container wall(s) in such a manner that not only a detachment is allowed, but in case further detachment and attachment operations can be carried out in succession of said flap(s) to said wall(s)

In the preferred embodiment of figures 1-3, the foldable flap is formed by three portions 9, 10 and 11, integral to each other and to the side 12 of wall 6, and provided with creasings allowing their easy folding.

In particular, portions 9 and 11 have a substantially equal area as that of walls 3 or 4, while portion 10 has an area corresponding to that of walls 5 or 6. In the formed or shaped container the recto of portions 9, 10 and 11 is placed in contact with the verso of walls 3, 5 and 4, respectively, so that the portions are superimposed to the respective walls. It is obviously possible that the area of these portions is smaller than that of the corresponding walls so that the portions 9-11 overlap said walls only in part.

In order to maintain said portions adhering to the corresponding walls and in any case allow them to be unfolded when desired, means are provided for detachably bonding the same in correspondence with the edge 13 of portion 11.

Said means can be formed by any known device in the art, such as for instance strips of pressure adhesive of the repositionable type, for instance a non permanent adhesive of the type as used for self-adhesive repositionable tickets.

In the preferred embodiment of figures 1-3, said means comprise one or more sticking points permanently bonding the end edge 13 of portion 11 to the corresponding area 14 of wall 4. The area of portion 11 which is thus fixed to the underlying wall 4 is defined with reference to the remaining part of portion 11 by means of a pre-set breaking line 13 which allows, when broken, to unfold the portions 9-11. To make said breaking easier, the wall 4 is provided with a notch 16'.

If an embodiment is wanted wherein it is possible to bond again the portion 11 to the wall 4 of the container after breaking along the line 15, the container bears reversible bonding means of the foldable flap to the container wall 4. These reversible bonding means can be for example in the form of pressure adhesive or, as shown in figs 1 and 3, in the form of a slot 16 cut in the wall 4 and in which a zone of the new edge of portion 11, as obtained after its detachment from the permanently stuck part to wall 4, is housed.

The recto of portions 9, 10 and 11 and the verso of wall 3 define an area large enough for printing information thereon and can therefore represent a valid alternative to the free internal leaflet.

According to a further embodiment, the foldable flap carries bonding means allowing its full detachment and withdrawal from the container body, said means (not shown) being advantageously formed by a pre-set breaking line. During the manufacturing operations of the aforescribed

container, a die-cut piece 1 is obtained provided along its side with a foldable, 9-11, so as to be external and superimposed to at least part of one or more corresponding walls of the formed box, and said information are printed, before or after the die-cutting operation, on the area corresponding to the recto of flaps 9-11 and to the verso of wall 3 of the die-cut piece (when the container is formed, this area corresponds to the internal side of the flap and to the external side of the wall, in a way that the information are not readable without breaking the flap 11 along its line 15).

The die-cut piece 1 is then fed to a folding and sizing machine, of a known type, with the foldable flap that in this case is positioned perpendicularly to the feeding direction.

Then the walls 2 and 3 are overlaid to the walls 5 and 4, driving the wall 2 adjacent to the wall 6. A bonding agent is then applied in correspondence with at least one of said walls and of the flap outer edge, i.e. of the edge 13 of the more external flap portion 11; a second folding is performed by superimposing the wall 3 to flap 9, sticking to one another the walls 2 and 6 and forming the container body. A third folding and sticking operation is carried out on the edge 13 onto the corresponding wall 4, resulting in a complete shaping of the container according to the invention, which is kept open and flat up to its final packaging by means of a retractor, according to the known technique. It is evident that the container according to the invention makes this operation much easier, avoiding a free internal leaflet handling.

Claims

1. A container, in particular for packings of drugs and similar products, of the type consisting of a single die-cut piece, folded and stuck, characterized in that at least one of the sides of said die-cut piece is provided with at least a flap foldable externally to the container itself and in that said container is provided with detachable bonding means to keep said foldable flap or flaps substantially adhering to one or more corresponding walls of the formed container and allow their unfolding when desired, and in that on at least a part of said flap(s) and/or said corresponding wall(s), information, warnings or similar messages are printed.
2. A container according to claim 1, characterized in that said foldable flap is formed by three portions integral to each other and to said side of the die-cut piece, said portions being superimposed to as many corresponding walls of the container.

3. A container according to claim 1 or 2, characterized in that said detachable bonding means comprise one or more bonding points positioned between the end edge of said foldable flap and the underlying wall, to permanently join said edge and said wall to one another, the stuck edge area being defined with respect to the remaining wall of flap by means of a pre-set breaking line; as well as means to fix in a reversible way to said wall said remaining portion of flap or vice versa. 5
4. A container according to claim 1 or 2, characterized in that said detachable bonding means comprise strips of pressure adhesive of the repositionable type. 10 15
5. A container according to claim 3, characterized in that said reversible fixing means are in the form of one or more zones of re-positionable adhesive. 20
6. A container according to claim 3, characterized in that said reversible fixing means are in the form of at least a slot provided in said wall, in correspondence with said breaking line of said foldable flap. 25
7. A container according to one of claims 1 to 6, characterized in that said foldable flap further comprises means for fully detaching the same from the container body. 30
8. A die-cut piece to obtain a container according to one of claims 1 to 7. 35
9. A method for manufacturing a container according to one of claims 1 to 7, characterized in that it comprises the steps of:
 - obtaining a die-cut piece provided, along at least one of its sides, with at least a foldable flap, in a way it results to be external and able to be superimposed to at least part of one or more corresponding walls of the formed container; 40 45
 - printing, before or after the manufacture of said die-cut piece, a text and/or information required on said wall or walls and/or on the internal side of said foldable flap(s);
 - folding and sticking to each other the die-cut walls to form the container body; and 50
 - folding said flap(s) and fixing it (them) in a detachable way onto the corresponding wall(s) of the container. 55
10. A method according to claim 9, to manufacture a container according to claim 3, characterized by the further steps of:

feeding said die-cut pieces to a folding and sizing machine with said foldable flap perpendicular to the feeding direction;
 performing a first folding by driving adjacent to one another the two walls of the box which must be stucked; applying a bonding agent in correspondence with at least one of said walls and the more external edge of said flap; performing a second folding by sticking to each other said walls and superimposing a first wall of the container to the more internal edge of said foldable flap; and
 performing a third folding by superimposing two subsequent walls of the container to the remaining two edges of said foldable flap and fixing said more external edge of the foldable flap to the corresponding wall of the box, provided with a slot.

Fig.1

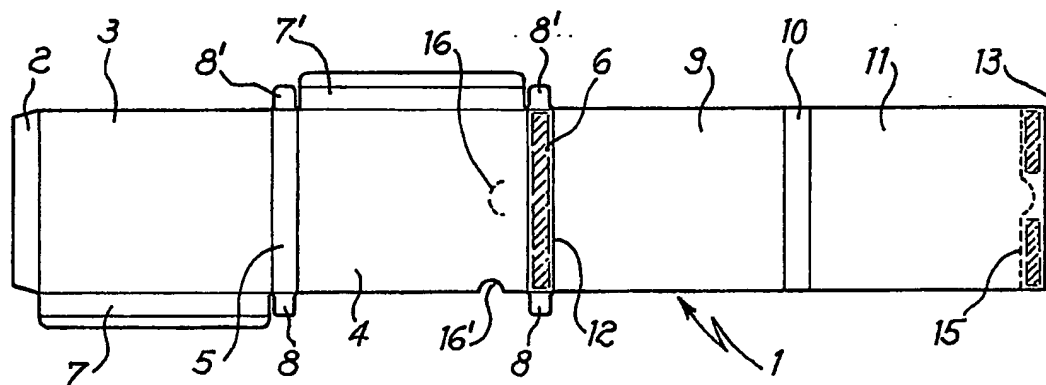


Fig.2

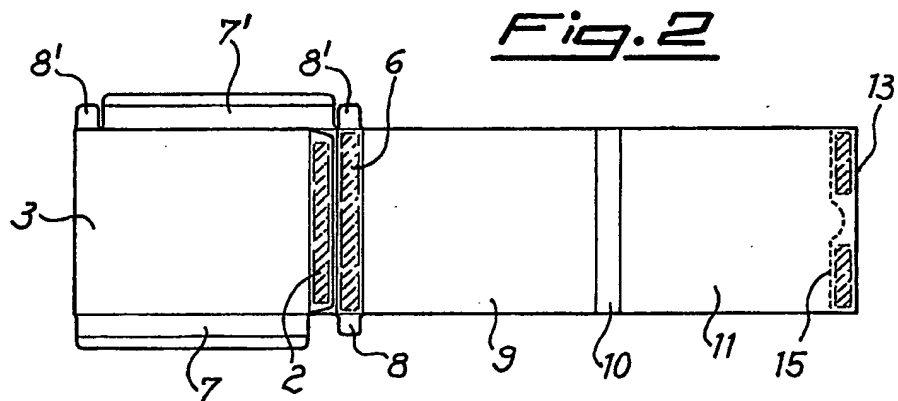
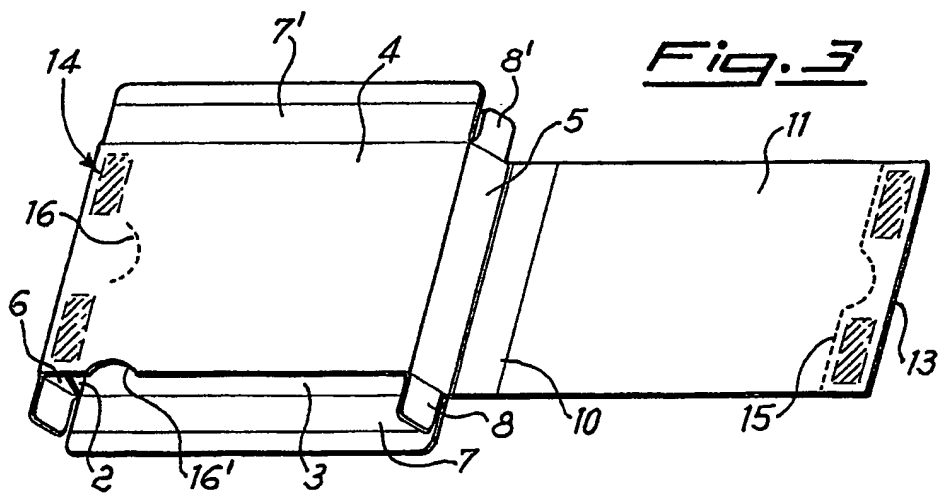


Fig.3





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EUROPEAN SEARCH REPORT

Application Number

EP 90 12 2089

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	GB-A-2 116 949 (MOUNTFORD) * the whole document * -----	1,2,8,9	B 65 D 5/42 B 65 D 5/02
A	EP-A-0 234 079 (TAYLOWE) * the whole document * -----	1,4,5,7-9	
A	US-A-3 099 381 (MEYERS) * the whole document * -----	1,7	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B 65 D
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
Berlin		07 March 91	SMITH C A
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document			